

Eastern Diversified Metals Superfund Site

The U.S. Environmental Protection Agency continues to supervise the cleanup of the Eastern Diversified Metals Superfund Site. Contractors for AT&T, now known as Lucent Technologies, continue to perform various study, design, and construction activities.

November 1997

Site Treatment Plant Under Construction

Currently, contractors are on the site enlarging the Site Treatment Plant (STP) building and adding a 20,000-gallon storage tank and a 30,000-gallon biological treatment system. The STP removes metals and solids from the shallow ground water and treats fluff pile seepage, known as leachate, which is rainfall that collects contaminants when it passes through the waste fluff at the site.

Site Treatment Plant Improvements

The STP is being upgraded to better treat the leachate from the fluff pile and the shallow ground water underneath the fluff pile. The fluff pile consists of discarded chopped telephone and power wire insulation. The STP building is being enlarged to:

- Allow re-configuring of the existing equipment;
- Protect new electronic control equipment necessary for the biological treatment system;
 and
- Provide space for a maintenance and a laboratory/work area.

Storage Tank

A 20,000-gallon storage tank is being added to equalize and slow the flow of waste water into and through the STP. The tank should help to capture leachate generated from sudden or long-lasting rain storms and allow the STP to treat this water over a longer period of time.

Biological Treatment System

The 30,000-gallon biological treatment system is being added to allow the STP to operate more efficiently. The system consists of an **aeration tank**, **a clarifier**, and **a sludge storage tank** (*see illustration below*). The biological treatment system cleans waste water using bacteria that transforms the contamination into harmless byproducts. Fluff pile leachate will be piped directly into the new biological treatment system.

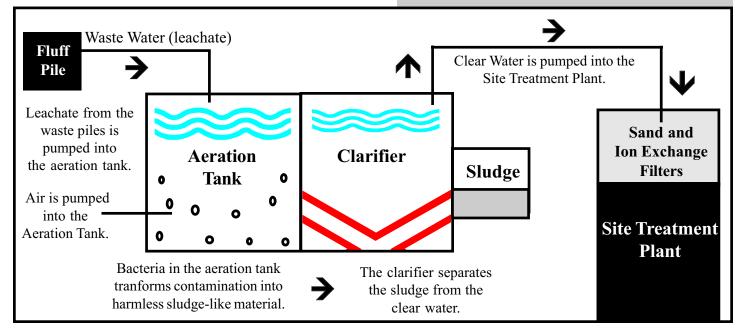
First, the leachate will be pumped into the aeration tank where air will be blown into the leachate to enhance the growth of bacteria. This bacteria uses the chemicals and iron in the leachate as a food source. The bacteria will digest the chemicals in the leachate, transforming the chemicals into harmless by-products. The bacteria and by-products formed through this process turn into a sludge which then can be separated from the clear water.

Next, the leachate travels into the **clarifier**. The clarifier separates the clear water from the sludge formed by the bacteria and its by-products.

The clear water from the clarifier then passes through the existing **sand and ion exchange filters** in the STP building. These filters remove zinc and other metals.

The addition of the biological treatment system to the STP should eliminate the clogging and fouling of the sand and ion exchange filters.

Biological Treatment System



Main Fluff Pile Study Continues

In June, Lucent signed an EPA Consent Order agreeing to conduct a Focused Feasibility Study (FFS) to analyze cleanup options for the main fluff pile cleanup at the site. EPA recently approved the FFS work plan, authorizing Lucent to conduct this analysis.



Currently, EPA is reviewing a treatability study that confirmed the presence of polychlorinated biphenyl (PCB) at levels of concern in some of the plastic waste. This would prohibit the recycling of this plastic into other products. As part of the FFS, contractors for Lucent are investigating whether some of the plastic in the pile can be used as a fuel to generate electricity.

All options under review call for the removal of the fluff from the site. EPA will notify the public of the results of the FFS and solicit input from concerned citizens on any proposed change to the remedy selected for the fluff pile.

Dioxin Hotspot Largely Removed

All but one segment of the dioxin hotspot area has met EPA's cleanup goal. Additional fluff was excavated in October 1997 and currently is stored onsite while samples are being analyzed.

The total volume of dioxin-contaminated waste removed from the site to date is approximately



1,000 cubic yards. This waste has been transported off the site for incineration in Coffeyville, Kansas.

Information Repository

Similar to a mini-reference library, an **Information Repository contains** technical and legal information about the site. Documents EPA uses in making decisions about the site cleanup are in this public file.



Copies of the approved construction work plans are in the information repository. EPA will continue to place copies of documents related to the site in the Information Repository for public review and comment. The Information Repository for this site is located at:

> Rush Township Municipal Building RD31, Box 1326 Tamaqua, PA 18252 717-668-2938

Hours: Monday - Friday, 8 a.m. to 3 p.m.



For more information, please contact these U.S. EPA Representatives:



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(or Current Resident)